U.S.S.N. 09/966,309

-10-

25098A

#### REMARKS

This document is responsive to the non-final Office Action dated October 18, 2007, reopening prosecution following Applicant's filing of an Appeal Brief. The following remarks address and are believed to overcome all outstanding rejections. Upon review, it is hoped that the Examiner will agree and avert the need for reinstating the appeal by withdrawing the rejections and issuing a Notice of Allowance with respect to all pending claims.

#### A. CLAIM 1 MEETS 35 USC SECTION 112, FIRST PARAGRAPH

The Examiner rejects claim 1 because it allegedly violates the strictures of Section 112, first paragraph. The genesis for this rejection is "expressed or implied" support is allegedly lacking for the limitation that the thermoplastic polymer coating is "free of random discontinuities." However, <u>U.S. Patent law does not in any way mandate "expressed support" for a limitation in the specification.</u> Rather, it is sufficient if the originally filed disclosure would have conveyed to one having ordinary skill in the art that the inventor had possession <u>of the concept</u> of what is claimed.<sup>2</sup>

Full support for the "negative" limitations in claim 1 may be found in paragraph 6 of the published application, as well as in the drawing figures (see, e.g., Figure 2 illustrating the continuous, uninterrupted coating 54 free from random discontinuities covering the non-woven fiber tissue or mat 52 to thereby significantly reduce the porosity of the wall covering). These drawings undoubtedly form part of

<sup>1</sup> Behr v. Talbott, [No West Cite] 27 USPQ2d 1401 (BPAI 1992) ("The test for determining compliance with the written description requirement is whether the disclosure of the application as originally filed, including the original drawings, would reasonably have conveyed to the artisan that the inventor had possession at that time of the later claimed subject matter, rather than the presence or absence of literal support in the specification for the claim language.").

<sup>2</sup> In re Anderson, 471 F.2d 1237, 176 USPQ 331(CCPA1973).

-11-

25098A

the written description, so "expressed support" for the limitation at issue is thus provided.<sup>3</sup>

Despite acknowledging that Figure 2 illustrates a layer of thermoplastic polymer 54 undoubtedly continuous and uninterrupted, the Examiner contends that "the disclosure is silent as to what these discontinuities are" (Office Action mailed October 18, 2007, p. 8, ll. 4-5). The Examiner essentially wants the Applicant to prove a "negative" by showing where an intentionally omitted structure (random discontinuities) is described in Applicant's specification or shown in the drawings. Simply put, the polymer layer 54 at issue is "free" of random discontinuities, as illustrated, which is all that claim 1 requires. Here, the requirement of Section 112, first paragraph, is clearly met, since as Applicant has pointed out and the Examiner does not contest, the polymer layer 54 shown in the drawings is continuous and thus "free of random discontinuities." Accordingly, withdrawal of the rejection is in order.

### B. CLAIMS 1, 8 AND 30 COMPLY WITH SECTION 112, SECOND PARAGRAPH

The Action further contends that claim 1 runs afoul of Section 112, second paragraph, because the limitation requiring that the "porosity of the wall covering is reduced significantly" by the polymer coating is allegedly indefinite. This indefiniteness results from the uncertainty as to whether the Applicant is "trying to refer to a reduction of the porosity of the non-woven fiber tissue or mat instead?" (Office Action mailed October 18, 2007, p. 3,  $\P$  4).

This statement apparently disregards the fact that claim 1 expressly requires that the porosity of the overall <u>wall covering</u> is reduced by the polymer coating covering the non-woven fiber tissue or mat. No reasonable interpretation of the

<sup>3</sup> Vas-Cath Inc. v. Mahurkar, 935 F.2d 1555, 1565, 19 USPQ2d 1111, 1116 (Fed. Cir. 1991) ("drawings alone may provide a 'written description' of an invention as required by Section 112").

-12-

25098A

claim or reading of the language would cause a skilled artisan to query whether it is the wall covering or the fiber tissue or mat that has reduced porosity. Indeed, the Examiner's interpretation is strained, since the porosity of the fiber tissue or mat itself remains unchanged as a result of the polymer covering, even though the porosity of the overall wall covering is understandably reduced by the addition of a layer. Since the language used is perfectly clear and would be easily understood by a skilled artisan, it is believed that the claim is definite and the rejection should be withdrawn.

The Examiner also suggests that the claim must include a "parameter" that would "allow one of ordinary skill in the art to determine what is the porosity of the claimed material" in order to render the "reduced porosity" limitation definite. Such a requirement is plainly not in accordance with the Manual of Patent Examining Procedure, which explains that "[t]he fact that claim language, including terms of degree, may not be precise, does not automatically render the claim indefinite." MPEP § 2173.05(b) (8th ed., Rev. 5, Aug. 2006). Here, a skilled artisan would easily understand from the claim language that the porosity of the wall covering is reduced by the addition of the polymer layer without the identification of any parameter. See, e.g., the Jackson patent itself, which in claim 1 recites a "coating being applied at a thickness which is sufficiently low to cause formation of miniature discontinuities..." (Emphasis added). Accordingly, the addition of some precise amount of the reduction achieved, as the Examiner seems to think is required, is unnecessary and would unduly narrow the Applicant's claim.

No <u>substantial</u>, <u>objective evidence</u> cited establishes that a violation of Section 112 exists here. Rather, the Examiner merely states her unsupported opinion that claim 1 is deficient, without even giving a reason as to why a skilled artisan would

be unable to ascertain the claim scope. Indeed, Applicant submits that the change suggested by the Examiner to establish "what is the reduced porosity compared to" is not necessary, since this meaning would be clear to a skilled artisan reviewing the present specification, even if such is not expressly set forth in the claims (*see*, *e.g.*, ¶6 of Applicant's published specification, which explains that "The polymeric coating is a thermoplastic material that covers the surface of the glass fiber tissue, thereby reducing porosity significantly.").

The Examiner further rejects claims 8 and 30 under Section 112, second paragraph "because the Applicant has not provided a copy of the procedure used to measure the water vapor transmission rate by the DIN Standard 52615" (Office Action dated October 18, 2007, pp. 3-4, ¶ 5). "The primary purpose of the definiteness requirement is to ensure that the claims are written in such a way that they give notice to the public of the extent of the legal protection afforded by the patent, so that interested members of the public, e.g., competitors of the patent owner, can determine whether or not they infringe. That determination requires a construction of the claims according to the familiar canons of claim construction."<sup>4</sup> One of those canons is that claims must be construed as one skilled in the art would understand them in light of the specification of which they are a part.<sup>5</sup>

One skilled in the specifically in the art of providing coverings for objects, such as walls, to reduce vapor transmission is unquestionably familiar with the DIN (German Industrial) Standard 52615. See, e.g., U.S. Patent No. 7,108,227 to Kunzel et al. and U.S. Patent Application Publication Nos. 20060059852, "Laminated building materials"; 20050284096, "Vapor barrier for use in the heat insulation of buildings";

<sup>4</sup> All Dental Prodx, LLC v. Advantage Dental Prods., 309 F.3d 774, 779-80, 64 USPQ2d 1945, 1949 (Fed. Cir. 2002) (citations omitted).

<sup>5</sup> Orthokinetics, Inc. v. Safety Travel Chairs, Inc., 806 F.2d 1565, 1575, 1 USPQ2d 1081, 1088 (Fed. Cir. 1986).

-14-

25098A

20030165667, "Tougher, softer nonwoven sheet product"; 20030068483, "Polypropylene base porous film and production process for the same"; and 20030022576, "Microbicidal wallcoverings." All of these patent documents mention this well-known standard for use in measuring vapor transmission without further elucidating its requirements. Claim 1 in the '227 patent even specifically mentions the standard in the same manner as the Applicant, and was allowed without any contention of indefiniteness. This is establishes the well-known meaning of this Standard and, thus, its definiteness for purposes of Section 112, second paragraph. The Examiner presents no countervailing evidence or even a reason as to why a skilled artisan would not understand the meaning or scope of Applicant's claims 8 and 30, given the well-known nature of this DIN Standard. Accordingly, withdrawal of the rejections of claims 8 and 30 under Section 112, second paragraph is in order.

# C. THE INVENTIONS OF CLAIMS 1, 3-4, 11-12, 22, 23, 25-26, 33-34, 36, AND 40 ARE NOT ANTICIPATED BY JACKSON

The Examiner cites Jackson to reject claims 1,3-4,11-12,22,23,25-26,33-34 and 36 as anticipated. A finding of anticipation is proper "only if each and every element as set forth in the claim is found, either expressly or inherently described, in a <u>single prior art reference</u>" MPEP § 2131 (8th ed., Rev. 5, Aug. 2006) (Emphasis Added).

Turning first to claim 1, the anticipation rejection made disregards the plain requirements of the claim. Specifically, claim 1 requires that the claimed <u>coating</u> (not just the surface) is free of random discontinuities that, if otherwise present, would substantially increase porosity of the wall covering. In stark and total contrast, Jackson discloses a wall covering having a "<u>porous</u> polymeric ply . . . fused to and supported by a nonwoven substrate ply" (emphasis added). At column 3, lines 51-

55, Jackson expressly defines "porous" and "continuous" <u>synonymously</u> as referring to "the existence of a multitude of small holes, openings or gaps in the polymeric <u>ply</u> of the wallcovering," not just its surface. Noteworthy is the fact that Jackson, choosing to be his own lexicographer, selected a definition of the word "continuous" that does not comport with the ordinary meaning of "uninterrupted."

Jackson thus does not disclose, teach or otherwise suggest a <u>coating</u> that <u>covers</u> the non-woven mat in a <u>continuous fashion</u> (giving "continuous" its ordinary meaning) and free of random discontinuities, as shown in Applicant's Figure 2. Quite the contrary, this reference actually teaches away from such an arrangement by virtue of the critical need for <u>holes</u> in the outer ply of the wall covering (see, e.g., col. 5, lines 45-51, "The <u>key feature</u> of the coating or plastisol application process is that the plastisol is applied very thinly to the nonwoven substate ply . . . [which] results in small discontinuities, holes, or gaps, <u>which upon fusion form miniature holes or pores in the fused polymeric ply</u>" (Emphasis added)). Jackson is also completely silent as to whether the polymeric ply covers the nonwoven substrate in a manner that would in any way facilitate painting (not printing), including by way of a roller. Accordingly, withdrawal of the rejection of claim 1 is respectfully requested, for the cited reference does not teach the exact invention of this claim.

Turning to claim 23, the Examiner does not in any way contend that Jackson discloses a layer of paint <u>roller-applied</u> to a thermoplastic polymer coating on a non-woven fiber tissue or mat. The Examiner does contend that "the manner in which the paint is applied is not relevant to the final product being claimed." Applicant respectfully disagrees with this conclusion, which not only lacks support in any authority cited by the Examiner, but is also contrary to precedential decisions

<sup>6</sup> Intellicall, Inc., v. Phonometrics, Inc., 952 F.2d 1384, 1388, 21 USPQ2d 1383, 1386 (Fed. Cir. 1992) ("An inventor may "be his own lexicographer and . . . give terms uncommon meanings."), but cf. Jonsson v. Stanley Works, 903 F.2d 812, 820, 14 USPQ2d 1863, 1871 (Fed. Cir. 1990) ("[w]ords in a claim ... [are] given

previously cited by the Applicant. See Hazani v. U.S. International Trade Commission, 44 U.S.P.Q. 2d 1358 (Fed. Cir. 1997) (holding that the limitation "chemically engraved" in a claim describes the product more by its structure than by the process used to obtain it.); see also In re Garnero, 412 F.2d 276, 278-79, 162 U.S.P.Q. 221, 223 (CCPA 1969) ("it seems to us that the recitation of the particles as 'interbonded one to another by interfusion between the surfaces of the perlite particles' is as capable of being construed as a structural limitation as 'intermixed,' 'ground in place,' 'press fitted,' 'etched,' and 'welded,' all of which at one time or another have been separately held capable of construction as structural, rather than process, limitations"). Accordingly, withdrawal of the rejection is in order.

Claim 36 also stands rejected as anticipated by Jackson. This claim expressly requires a "rigid" fiber tissue or mat. In stark contrast, Jackson teaches that the structure allegedly corresponding to the claimed tissue or mat is "soft." The Examiner does not in any way contend that Jackson discloses the claimed rigid structure. The rejection of claim 36 must therefore be withdrawn.

Claim 40 requires a thermoplastic polymer with a mineral filler forming a visible outer, non-smooth roller paintable surface of a wall covering with a non-woven tissue or mat having a visible inside surface as well. As noted above, Jackson specifically extols a smooth outer surface, and concomitantly disparages a non-smooth outer surface. See, e.g., col. 2, lines 5-12, "there exist[s] a need for a . . . wall covering having a relatively higher permeability, yet which has a smooth outer exposed surface." The Examiner agrees that Jackson "provides a polymeric ply having a smooth continuous appearance." (Office Action, p. 4,  $\P$  6) (emphasis in original). Despite the fact that Jackson teaches a smooth surface, this claim requiring the exact opposite structure as that taught in the prior art reference cited is rejected

their ordinary and accustomed meaning.")

-17-

25098A

as being anticipated. Respectfully, the Examiner's position regarding the anticipation of claim 40 by Jackson is not supported by any substantial evidence, and withdrawal of the rejection is in order.

The Action also states that "it is the Examiner's interpretation that the materials disclosed by Jackson <u>read on</u> those described by Applicant's own specification as to produce the claimed 'non-smooth' surface." *Id.* (emphasis added). This is simply not correct. Applicant's specification describes the use of calcium carbonate to provide the claimed non-smooth outer surface, potentially along with the use of mica, talcum, or clay. Nowhere does Jackson describe the use of calcium carbonate, let alone in combination with the other materials mentioned in Applicant's specification. Indeed, this is confirmed by the Examiner's later reliance on a secondary reference for this missing teaching. The only way to conclude otherwise is to ignore the express teaching of Jackson that a smooth surface is desired, rather than the claimed non-smooth one.

## D. THE INVENTIONS OF CLAIMS 2, 8, 24, 30 AND 37 ARE NEITHER ANTICIPATED NOR RENDERED OBVIOUS BY JACKSON

Although believed to be allowable as dependent on an allowable base claim, Applicant notes the independent patentability dependent claim 2, requiring the outer surface of the polymer coating have a surface tension of at least approximately 30 dynes/cm, and dependent claims 8 and 30, which require a specific water vapor transmission rate. The Examiner acknowledges that Jackson is completely silent as to the claimed surface tension and vapor transmission rate, and no other reference is cited as allegedly supplying these missing teachings. However, the conclusion is nevertheless reached, without citation to any substantial evidence, that such a surface tension and water vapor transmission rate would be "inherent" to the product of Jackson because it allegedly uses the same starting materials, "like"

-18-

25098A

manufacturing processes, and produces "similar" end products. As a result, the Examiner concludes the inventions of these claims are unpatentable. Without discussion, the same analysis is applied in rejecting dependent claim 24 and independent claim 37, which also require a polymer coating have a surface tension of at least approximately 30 dynes/cm.

These rejections contravene not only to the Manual of Patent Examining Procedure, but also precedential decisions holding that "the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." Not only do the steps described for forming the claimed wall covering differ completely from those outlined in Jackson, but Applicant's processing involves a treatment designed to impart a particular surface tension in order to facilitate roller painting, as well as a certain vapor transmission rate. As acknowledged in the record, Jackson fails to mention the surface tension of the substrate or any steps taken to alter it, and actually uses different materials. Accordingly, it cannot possibly render the inventions of claims 2 or 37 obvious.

In the alternative, the Examiner asserts that the "presently claimed function of surface tension . . . would have obviously been provided as a result of the product of" Jackson, apparently relying on a theory of "obviousness by inherency." However, "[t]hat which may be inherent is not necessarily known" and "[o]bviousness cannot be predicated on what is unknown." Moreover, "a retrospective view of inherency is not a substitute for some teaching or suggestion supporting an obviousness rejection." Since Jackson nowhere contemplates, teaches, suggests, or even discusses surface tension to improve the roller paintability

<sup>7</sup> See Ex parte Levy, [No West Cite] 17 USPQ2d 1461, 1464 (BPAI 1990) and MPEP § 2112, generally.

<sup>8</sup> In re Spormann, 363 F.2d 444, 448, 150 USPQ 449, 452 (CCPA 1966).

<sup>9</sup> In re Newell, 891 F.2d 899, 901, 13 USPQ2d 1248, 1250 (Fed. Cir. 1989).

of a wall covering, it standing alone cannot possibly make it known to provide a surface tension within the claimed range.

In an effort to refute Applicant's position, the Examiner cites to *In re Skoner*, 186 USPQ 80 (CCPA 1975) for the proposition that "reliance on inherency is not improper even though [sic a] rejection is based on Section 103 instead of Section 102." While that is no doubt the holding of that case, it resulted from a much different factual situation than the one confronting the Examiner. In *Skoner*, the claim at issue covered wire brushing to a certain extent to produce a certain surface condition. The prior art reference taught wire brushing generally, but not to the extent required to produce what was claimed. Understandably, the Board was willing to find that wire brushing to the extent claimed was inherent in the reference, given that wire brushing was generally disclosed.

In stark and total contrast, nothing in Jackson even remotely mentions enhancing surface tension using any process, let alone surface tension in general. Thus, it simply cannot be the case that the value suggested by the Applicant as creating advantageous surface characteristics for purposes of roller painting are "inherent" in Jackson. Thus, *Skoner* is inapposite and does not support the examiner's position.

Looking at the situation from a different perspective, Jackson does not "enable" a skilled artisan to make a wall covering having the claimed surface tension. There can be no doubt that Jackson does not describe Applicant's claimed invention sufficient to place it in possession of a person of ordinary skill in the art, when in fact the particular surface tension claimed by the Applicant is not even remotely mentioned. Accordingly, it cannot be the case that Jackson renders the claimed inventions unpatentable, and withdrawal of the rejections is in order.

E. Claims 5-7, 9-10, 13, 27-29, 31-32, 35, and 38-39 are Patentable

U.S.S.N. 09/966,309 -20-

25098A

## OVER JACKSON AND NUCCI ET AL.

Claims 5 and 27 require that thethermoplastic coating of the corresponding independent claims is a "matrix polymer resin" selected from the group consisting of low density polyethylene, high density polyethylene, polypropylene, and combinations thereof. In the Action, the Examiner acknowledges that no such teaching is found anywhere in Jackson. Therefore, reliance is made on U.S. Patent No. 6,265,067 to Nucci et al. as allegedly supplying the teaching missing from Jackson that would render the inventions of these claims obvious.

The U.S. Supreme Court in KSR International Co. v. Teleflex, Inc., 550 U.S. \_\_\_\_, 82 USPQ2d 1385 (2007) reiterated that "rejections on obviousness cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness." KSR, 550 U.S. \_\_\_\_, 82 USPQ2d at 1396 (quoting In re Kahn, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006)). Moreover, an invention "composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art." Id.

Here, the Examiner states in a conclusory fashion that a skilled artisan would combine the independent teachings of these references "with the motivation of producing a surface material that combines some of the properties of both paper sheets... and plastic sheets." However, the invention of Nucci already meets this goal, since this language recited by the Examiner appears to be taken directly from that reference. Hence, this broad statement of an advantage afforded by the invention of one of the cited references cannot and does not cannot qualify as "articulated reasoning with a rational underpinning" as to why a skilled would substitute the polymers recited in Nucci with the plastisol of Jackson (which by definition includes a plasticizer) in order to produce "a surface material that

-21-

25098A

combines some of the properties of both paper sheets . . . and plastic sheets."

The Examiner's position also ignores the express statement in Jackson that a "key feature" of the coating or plastisol application process is that the plastisol is applied very thinly to the nonwoven substate ply . . . [which] results in small discontinuities, holes, or gaps, which upon fusion form miniature holes or pores in the fused polymeric ply." (see, e.g., col. 5, lines 45-51). Absolutely no substantial evidence or rational underpinning supports the conclusion that modifying the porous layer of Jackson to "provide" it with the "composition" of Nucci, as alleged, would retain this "key feature." Indeed, the Examiner does not in any way explain how using the composition of Nucci the desirable small holes or pores in the ply would be retained in the product of Jackson. Accordingly, even if the teachings of these references are combined, there is no reasonable expectation of successfully achieving the stated objectives and, in fact, it appears that "key features" would be eliminated. Such is inimical to a finding of obviousness.

Claims 9, 10 and 31-32 require an opacifying agent in the coating sufficient to create an opacity of 70-90%. Nowhere does Jackson nor Nucci disclose providing an opacity in this range, and the Examiner does not in any way contend otherwise. Thus, a *prima facie* case of obviousness is lacking.

Claims 6-7 and 28-29 require a mineral filler to form a <u>non-smooth outer surface</u>. These claims stand rejected based on the combination of Jackson in view of Nucci. However, Jackson expressly teaches that such a feature is not a desirable attribute of a wall covering (*see*, *e.g.*, col. 2, lines 5-12, "there exist[s] a need for a ... wall covering having a relatively higher permeability, yet which has a <u>smooth</u> outer exposed surface."). Indeed, Jackson extols the desirability of providing a wall covering with a <u>smooth</u> outer surface (see Abstract, line 1), and simply does not

contemplate in any way imparting a mineral filler to create a non-smooth outer surface to facilitate roller painting.

When properly interpreted, Jackson thus actually teaches away from the claimed invention, and otherwise fails to motivate a skilled artisan to combine the teachings of Nucci to provide a wall covering with a non-smooth outer surface formed using a mineral filler. See, e.g. In re Gurley, 27 F.3d 551, 553, 31 USPQ2d 1130 (Fed. Cir. 1994) ("A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant."). By disregarding this teaching, the Examiner simply refuses to consider Jackson "as a whole," as is required by numerous precedential decisions.

With specific regard to claims 13, 35, and 38 each further requires that the polymeric material which is the coating comprises approximately a 45/5/50 by weight mixture of high-density polyethylene, titanium dioxide, and a dispersion, said dispersion comprising ground calcium carbonate and ground titanium dioxide in high density polyethylene. The primary reference to Jackson specifically requires a plastisol as a component of the polymer coating, which by definition includes a plasticizer. Such is clearly excluded by the plain terms of these claims, which do not recite a plasticizer as a part of the 100 weight percent of the polymeric material.

Nucci does nothing to cure this deficiency or otherwise supply the missing teaching necessary to conclude that Applicant's claimed inventions are obvious. The Examiner cites to a portion of Nucci discussing certain percentages of materials. However, nowhere does Nucci state that these materials are in a coating, as the claims at issue expressly require. Accordingly, neither Nucci nor Jackson disclose the claimed coating having the specific composition of these claims, and therefore

-23-

25098A

cannot render the inventions prima facie obvious.

On a final note, Applicant wishes to point out that the Examiner did not initial the proper boxes next to the non-patent references cited on the Form SB-08B received on February 23, 2007, even though the form is signed by the Examiner. Proper initialing to confirm consideration of these references is respectfully requested.

In view of the foregoing remarks, Applicant submits that all claims are allowable over the cited prior art and respectfully requests favorable treatment. In the event any issues remain, the Examiner is invited to telephone the Applicant's undersigned attorney, and may debit any fees due from Deposit Account 50-0568.

Respectfully submitted,

Margaret S. Millikin Reg. No. 38,969

Owens Corning 2790 Columbus Road, Route 16 Granville, Ohio 43023-1200 (740) 321-5359